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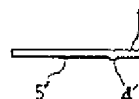
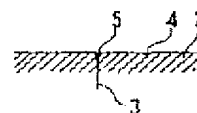
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TITLE : METHOD AND APPARATUS FOR
OBSERVING SURFACE SHAPE BY
REPRICA



ABSTRACT : PURPOSE: To achieve a higher discrimination accuracy of cracking by a method wherein a surface of a metal member is treated to corrode, the corroded surface thereof is coated with fine opaque particles, a high polymer film softened is applied on the surface to harden and a replica obtained is observed.

CONSTITUTION: Surface of a metal member 2 is corroded using a corrosion liquid, the surface of the member 2 is coated with fine opaque particles and an excess of the fine particles 5 are wiped out. Under such a condition, a high polymer film 1 softened is put tight on the surface and when the film 1 is peeled after hardened, the fine particles 5' transferred are fixed on the film 1. A grinding flaw 4' transferred makes a projection alone on the surface of the film 1. When the film 1 having the fine particles (cracking part) 5' transferred thereon is observed with an optical type metal microscope, the fine particles 5' are recognized as surface shape of the cracking 3, but the shape of the grinding flaw 4' transferred is little observed because the film 1 itself transmits light by nature. This achieves higher discrimination accuracy of the cracking.

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